

Applicant : David White et al
Serial No. : 09/804,357
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Page : 3

Attorney's Docket No.: 07334-109002

REMARKS

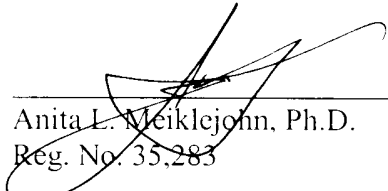
Applicants have amended the specification to insert missing SEQ ID Nos. as requested by the Examiner. Applicants also enclose copies of the previous amendments filed October 15, 2001 and October 26, 2001. Both amendments inserted SEQ ID Nos. and it appears that neither has been entered. Applicants respectfully request that the present amendment and the two previous amendments be entered and that their entry be confirmed.

Attached is a marked-up version of the changes being made by the current amendment.

Enclosed is a Petition for Extension of Time with the appropriate fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 12 NOV 2002



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Version with markings to show changes made

In the specification:

Paragraph beginning at page 2, line 25, has been amended as follows:

The human LIG46 cDNA described below (SEQ ID NO:[] 13) has a 1191 nucleotide open reading frame which encodes a 397 amino acid protein (SEQ ID NO:[] 14). This protein includes a predicted signal sequence of about 32 amino acids (from amino acid 1 to about amino acid 32 of SEQ ID NO:[] 14) and a predicted mature protein of about 365 amino acids (from about amino acid 33 to amino acid 397 of SEQ ID NO:[] 14 [; SEQ ID NO:]).

Paragraph beginning at page 24, line 29, has been amended as follows:

A nucleic acid fragment encoding a "biologically active portion of LIG46" can be prepared by isolating a portion of SEQ ID NO:1 or SEQ ID NO:3 which encodes a polypeptide having a LIG46 biological activity, expressing the encoded portion of LIG46 (e.g., by recombinant expression *in vitro*) and assessing the activity of the encoded portion of LIG46. For example, a nucleic acid fragment encoding a biologically active portion of LIG46 includes a galactosyltransferase-like domain[, e.g., SEQ ID NO:].

Paragraph beginning at page 25, line 30, has been amended as follows:

A nucleic acid fragment encoding a "biologically active portion of LIG56" can be prepared by isolating a portion of SEQ ID NO:5 or SEQ ID NO:7 which encodes a polypeptide having a LIG56 biological activity, expressing the encoded portion of LIG56 protein (e.g., by recombinant expression *in vitro*) and assessing the activity of the encoded portion of LIG56. For example, a nucleic acid fragment encoding a biologically active portion of LIG56 includes a GTP binding protein-like domain[, e.g., SEQ ID NO:].

Paragraph beginning at page 99, line 12, has been amended as follows:

For this study, a phosphothioate-protected antisense oligodeoxynucleotide and its respective control sequence (sense) were synthesized. The antisense oligodeoxynucleotide targets the LIG46 start codon mRNA at position 39.

Antisense: 5' CTT CGA CGC CCC ACA CTC AT 3' (SEQ ID NO:[] 16)

Sense: 5' ATG AGT GTG GGG CGT CGA AG 3' (SEQ ID NO:[] 17)

Male lean C57BL/6J (24 g) mice were individually housed in macrolon cages ($22 \pm 2^\circ \text{C}$; 12:12 h light/dark cycle with lights off at 6 pm). Tap water and mouse chow diet were given *ad libitum*. Mice were stereotactically implanted with a chronic guide cannula aimed to the third ventricle (intracerebroventricular) one week prior to this experiment.